

MEMPHIS AND SHELBY COUNTY HEALTH DEPARTMENT

Cancer Incidence Review, Cypress Creek, Shelby County, TN

Fact Sheet & Highlights

WHAT IS CANCER?

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells in the body.¹ Tumors can be found in all kinds of tissue, and can be benign (not cancer) or malignant (cancer). In the United States, 1 in 3 people will be diagnosed with some type of cancer during his or her lifetime.¹

WHAT ARE THE RISK FACTORS FOR CANCER?

Risk factors are things that can increase the chances of getting cancer. Most cancers are likely to be caused by more than one risk factor. Some risk factors can be controlled and others cannot.² Someone with one or more risk factor for cancer is more likely to develop the disease at some point in their lives, than those without risk factors. It is important to know that, people who have one or more risk factor for cancer will not always develop cancer.¹

Risk factors vary with each type of cancer. Risk factors may include age, race, gender, family history, diet, exposure to chemicals, radiation or tobacco. Genetics play a large role for many cancers; such as breast and colon cancer.² It is very important to review a family's cancer history to determine if someone is at increased risk for cancer.

HOW CAN CANCER SCREENINGS HELP?

Regular cancer screenings by a doctor or health care provider may result in the detection of cancer at earlier stages. Early cancer detection makes treatment more likely to be successful.³ Self-examinations for cancer may also result in early tumor detection.

WHAT IS A CANCER CLUSTER?

A cancer cluster is the occurrence of a greater than expected number of cases of a specific cancer within a group of people, a geographic area of concern, and within a defined period of time.

HOW IS AN ENVIRONMENTALLY RELATED CANCER CLUSTER DEFINED?

An environmentally related cancer cluster is established when the following evidence is present:

- Verified cancer cases within an defined geographic region
- A potential environmental exposure
- A "scientifically documented" connection between the exposure and the cancer of concern
- Statistical confirmation of the cancer cluster

WHY WAS THIS REVIEW CONDUCTED?

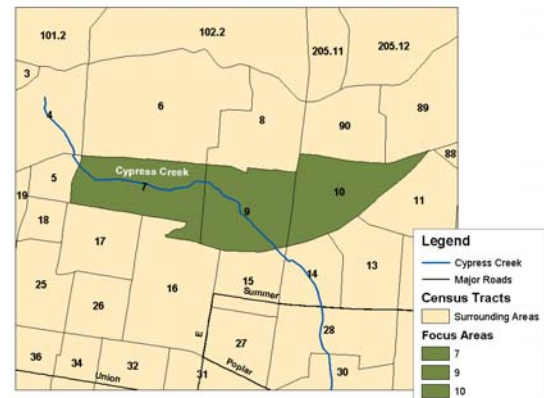
The Memphis and Shelby County Health Department (MSCHD) conducted this review because the environmental contaminant dieldrin, and other chemicals, were detected in the soil along Cypress Creek in Memphis, TN. Residents in the Cypress Creek community had also expressed concern about the risk of developing cancer due to possible exposure to these chemicals.

WHAT WAS THE PURPOSE OF THIS REVIEW?

The purpose of this review was to compare cancer rates along Cypress Creek to Shelby County cancer rates. This review cannot present or establish a relationship or association between dieldrin and cancer in the focus area population.

WHERE IS THE FOCUS AREA FOR THIS REVIEW LOCATED?

The focus area is located along Cypress Creek, between Evergreen Street and Jackson Avenue. See map below.



WHO WAS INCLUDED IN THIS REVIEW?

Any person diagnosed by a physician, between January 1, 1991 and December 31, 2000, with cancer of the breast, uterus, testicles, prostate, rectum or pancreas while living in the Cypress Creek Area (Census Tracts 7, 9 and 10) were included in this review.

WHY DID THE REVIEW ONLY FOCUS ON NEWLY DIAGNOSED CANCERS?

Newly diagnosed cancer cases were chosen for this review, instead of cancer deaths, because cancer deaths may be influenced by many other factors not linked to an exposure or a chemical. Examples of these factors are: the stage of cancer growth at the time of diagnosis and access to health care.

WHY WERE THESE CANCERS CHOSEN FOR THE REVIEW?

The six cancers analyzed in this review were chosen because they have a suspected association with some of the chemicals found in Cypress Creek.

WHAT IS A S.I.R.?

A standardized incidence ratio or S.I.R. estimates whether or not a larger number of cancer cases exists within the focus area when compared to Shelby County. Specifically, the S.I.R. is calculated by determining the ratio of reported cancer cases to the expected number of cancer cases.

WHAT DOES A S.I.R. TELL US?

The S.I.R. tells us how much higher or lower the focus area's cancer rate is compared to Shelby County.

WHY WERE AGE-ADJUSTED RATES REVIEWED?

Cancer rates tend to vary with age, and populations vary with respect to age groups. Therefore, incidence rates are age-adjusted to allow rates to be compared between different groups. Age-adjustment allows rates to be compared between population groups with different age distributions.

WHAT ARE THE FINDINGS OF THE REVIEW?

There are four (4) main findings:

1. The focus area was a low-income minority community.
2. Breast cancer for white females, in the focus area, was higher than expected. Expected cancers may be underestimated due to small population size.
3. The age-adjusted incidence rate of pancreatic cancer in African-American females, in the focus area, is statistically higher than in Shelby County.
4. The analysis of the five most common cancers indicates that breast cancer is the leading type of cancer for all females in both the focus area and in Shelby County. Also, pancreatic cancer is the 5th leading cancer in the focus area population, whereas it is the 7th leading cancer in Shelby County.

- The five most common cancers observed in the focus area, between 1991 and 2000, are:

Men		Women	
Prostate	28%	Breast	31%
Lung & Bronchus	24%	Lung & Bronchus	16%
Colon & Rectum	11%	Colon & Rectum	8%
Stomach	5%	Uterus	5%
Other	5%	Pancreas	5%

Source: Tennessee Cancer Registry. Data are approximately 80% complete.

- The five most common cancers observed in men and women in Shelby County, between 1991 and 2000, are:

Men		Women	
Prostate	25%	Breast	32%
Lung	21%	Lung	13%
Colon & Rectum	9%	Colon & Rectum	10%
Bladder	6%	Uterus	5%
Other	6%	Other	5%

Source: Tennessee Cancer Registry. Data are approximately 80% complete.

WHAT ARE THE REVIEW RECOMMENDATIONS?

1. To present findings to the Cypress Creek Community;
2. To request a public health consultation or further health analysis to be conducted by the State of Tennessee Department of Health; and
3. To coordinate with the State of Tennessee Department of Health to:
 - a. Review any additional health data for the focus area to address public health concerns; and
 - b. Review cancer death data to identify those cancers that may impact the focus area population

HOW CAN I GET A COPY OF THIS REVIEW?

A complete copy of this document can be downloaded from the Shelby County Government website, at www.shelbycountyttn.gov, or you may contact the Memphis and Shelby County Health Department, Epidemiology Program, at 901-544-7717, to request a copy.

WHERE CAN I FIND ADDITIONAL INFORMATION?

To find additional information on cancer and cancer clusters you may refer to the following agencies:

- Agency for Toxic Substances and Disease Registry (ATSDR) 1-888-422-8737 or www.atsdr.cdc.gov
- American Cancer Society (ACS) 1-800-227-2345 or www.cancer.org
- Centers for Disease Control & Prevention (CDC) 1-888-232-6789 or www.cdc.gov
- National Cancer Institute (NCI) 1-800-422-6237 or www.cancer.gov

REFERENCES

1. ACS, 2004. Cancer Fact & Figures, 2004
2. ATSDR, 2002. What is Cancer?
3. ACS. Cancer Reference Information. www.cancer.org/docroot/CRI/CRI_2_3.asp (04/2005)

Prepared by Memphis and Shelby County Health Department, Epidemiology Program (April, 2005).

